Special Places 2000:

Alberta's Natural Heritage

Completing Alberta's Endangered Spaces Network

Towards 2000 - Together

Draft

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Alberta

GOVERNMENT OF ALBERTA

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The Vision 1

The Framework 5

The Strategy 15

The Vision

The vision of Special Places 2000 is to complete a protected areas system that achieves the goals of protection, outdoor recreation, heritage appreciation and tourism.

Progressing Together

The story of protected areas as Alberta's *special places* is an emerging one, and closely reflects the relationship Albertans have with the land. Just as our society and lifestyles have been shaped by the natural resources of the province, Alberta's landscapes and resource base have been altered by our activities through the years. In particular, agriculture, forestry, mining and urban development have changed the landscape, forever. Our economic activities are intrinsically linked to the natural environment, with its ecological processes. Our continued prosperity – even our survival – is dependent upon striking a balance between the economy and the environment.

"Sustainable development must be our future, a future in which we concentrate on our quality of life by paying careful attention to both the environment and the economy at the same time." This vision articulated by the Alberta Round Table on Environment and Economy was shared by many of the participants of Toward 2000 Together - The Premier's Conference on Alberta's Economic Future (1992).

Sustainable development will be achieved through an integrated resource management philosophy. The protection of species and ecosystems, opportunities for natural heritage appreciation and some forms of recreation and tourism depends on their integration into the management of all lands in the province. Management of commercial activities, such as forestry, oil and gas and tourist resorts must include conservation and sustainable development as a basic philosophy. A complimentary and equally essential element of sustainable development is the establishment of a network of protected areas. Protected areas are not merely a bridge between the economy and the environment; they are our lifeline to an ecologically sustainable future.

Implementation of the vision, framework and strategy outlined in *Special Places 2000* will ensure that Alberta's natural heritage is retained as a legacy to be passed on to future generations. Together we can achieve the vision of *Special Places 2000* - to complete a protected areas system that achieves the goals of protection, outdoor recreation, heritage appreciation and tourism.

Goals for a Completed System of Protected Areas

Protection	To protect the full range of landscapes, environmental diversity and special natural features of Alberta.
Outdoor Recreation	To protect natural landscapes throughout Alberta for a variety of resource-based, dispersed recreation pursuits.
Heritage Appreciation	To protect landscapes that ensure, for Albertans and visitors, the opportunity to explore, understand and appreciate the full range of Alberta's natural heritage.
Tourism	To protect areas capable of sustaining adventure travel and ecotourism, including extended tours, and enable visitors to experience the unspoiled landscapes and abundant wildlife representative of Alberta's natural regions.

Together, protected area programs form a "bridge" from the past into the future, a "bridge" which conveys our hopes and desires for a sustainable environment and economy. The "bridge" relies on all its supports – ecological reserves, provincial parks, natural areas, wilderness, heritage rivers and others – which together form the solid support to ensure the protection of our special places - Alberta's natural heritage.

Together, Albertans will build this bridge by developing partnerships between all levels of government, with industry, with non-government organizations and with the general public. Protected area programs within government will be coordinated. The strengths and successes of existing programs will provide the basis for immediate action. Alberta will build on its past accomplishments. By the year 2000, Alberta will have in place a comprehensive network of protected areas.

Special Places 2000: Alberta's Natural Heritage is a foundation document. The document is a starting point from which to move forward ultimately leading to a Government plan of action. All Albertans along with industry, non-government organizations and other levels of government are invited to respond. Response is invited with regard to the scope of Special Places 2000 as well as to how the initiative should be implemented. Albertans views on which areas should be protected and how these special places should be managed is critical. Sufficient technical detail has been incorporated into Special Places 2000 so that those who have an expressed interest in protected areas can provide detailed responses. A summary document will be prepared for individuals and groups who have a general interest in protecting Alberta's natural heritage.

An Awareness

With recent and ongoing land allocation decisions for resource use, Albertans are expressing an increasing sense of urgency in getting on with the task of completing a comprehensive network of protected areas. The call for action is repeated at public forums dealing with parks, the environment and resource management.

Foundations for Action, Corporate Aims for the Ministry of Recreation and Parks (1988) was developed with extensive, province-wide public input. The framework for a system of protected areas representing Alberta's natural heritage while catering to societal needs for outdoor recreation, heritage appreciation and tourism, has strong public support.

Forest Management in Alberta, the report of the Expert Panel Review (1990), recommends that: "The selection process for new reserves and Natural Areas should be formalized immediately to ensure that significant ecosystems are represented in appropriate categories...rapid development could result in the loss or compromise of important candidate sites." The report further recommends: "The possibility and location of a boreal wilderness area should be investigated. All the provincial wilderness areas are located in foothill or mountain terrain."

Tourism 2000: A Vision for the Future (1991 Backgrounder), recognizes that "the tourism industry in Alberta has been built on the province's natural resource assets." In 1991 revenues from the tourism industry were in the order of $2.77 billion. These revenues are continuing to grow both in terms of total dollars and as a percentage of Alberta's gross

Alberta's liesure industry generates revenues over $6 billion per year with tourism contributing almost $3 billion and growing

Alberta's provincial parks attract 8.5 million user-days per year.

The tourism industry in Alberta has been built on the province's natural resource assets.

If we are successful in protecting our parks and reserves, we could become a global destination - eternally.

domestic product. Reflecting on the importance of protected areas to Alberta's growing tourism industry, participants at the Edmonton Regional Workshop (1991) noted: "that we are rapidly losing inventory and the integrity of our natural environment. This maintenance of inventory and integrity is critical, for if we are successful in protecting our parks and reserves, we could become a global destination - eternally. Otherwise, we are risking what is a leading role and leading position in the world." Delegates concluded "that we need to be more aggressive in the protection of our natural attractions."

Public sentiment clearly supports the need for a comprehensive system of protected areas.

Four reports, developed by the public and published by the Environment Council of Alberta as a public service make a strong case for protected areas. *People, Parks and Preservation* (1991) recognizes the need for a range of protected environments and concludes that the province's system of protection-oriented parks is only forty percent complete.

Saving the Strands of Life - Alberta's Biodiversity (1992) makes a strong case for conserving Alberta's biological resources. The report concludes that "protection of adequate parcels of natural habitat is the most effective strategy for preserving Alberta's biological diversity. These parcels must be large enough and diverse enough to maintain viable populations of all the species in the ecosystem."

Public input should focus on the designation and management of new protected areas.

Wild Alberta (1992) recommends that the province adopt an approved policy or program for completing the systematic protection of wilderness and ecological resources.

Protecting Ecosystems in Alberta - A Survey of Government Mechanisms (1992) concludes that there is a need for "a strong, long-term protection and conservation strategy that ensures adequate representation of the natural diversity of each of the natural subregions."

In March of 1992, the Canadian Council of Forest Ministers endorsed *Sustainable Forests*, which was signed by Alberta's Minister of Forestry, Lands and Wildlife. Sustainable Forests commits that "all members of the forest community will work toward completing, by the year 2000, a network of protected areas representative of Canada's forests, to provide ecological benchmarks, protect areas of unique ecological value and ensure wilderness experience."

The 1992 province-wide volunteer steward survey *Natural Areas 2000* re-confirmed the public's desire to see more and larger protected areas established throughout the province.

These calls to action are not unique to Alberta. The Federal Government's *Green Plan*, the Canadian Environmental Advisory Council's *Protected Areas Vision for Canada*, the World Wildlife Fund's *Endangered Spaces* and the Brundtland Commission's *Our Common Future* all express similar needs.

This new awareness is linked to the concept of sustaining natural resources and is based on the premise that a harmonious balance be struck between natural resource protection and utilization.

The public have repeatedly stated that they want to see action on the ground. Future public input should focus on which areas should be designated and how these should be managed.

On March 11, 1992 the Government of Alberta attended a joint press conference with His Royal Highness The Duke of Edinburgh, in his capacity as the

International President of the World Wildlife Fund. At this event and subsequently, the Premier and the Government of Alberta, in recognition of the importance of protected areas, reaffirmed its commitment to protected areas and to Alberta's participation in the Canadian Heritage Rivers program. *Special Places 2000* is the "bridge" that joins a vision, framework and strategy to establish a network of protected areas in Alberta by the year 2000.

What are Protected Areas?

Protected areas are special places that are explicitly legislated and managed to protect Alberta's natural heritage. Protected areas include biophysical features, processes and systems. More specifically, these areas include geological features and landforms, terrestrial and aquatic ecosystems, plant and animal species, populations and habitats as well as the environments that sustain them. Protected areas vary in significance from local through regional, provincial, national and international.

Alberta's view of protected areas is shared by others. The World Commission on Environment and Development referred to protected areas as being "... managed explicitly to conserve species and ecosystems." The Task Force on Northern Conservation referred to protected areas as being "... designated in order to preserve their primary use for ... scientific, educational, aesthetic, recreational or biological purposes, so as to maintain natural conditions or to preserve certain features." The Canadian Environmental Advisory Council, in its 1991 report *A Protected Areas Vision for Canada* defines a "network" of protected areas as a collection of natural areas that includes ecological reserves, national, provincial and territorial parks, wildlife refuges and other designated areas, including private landholdings. This network would protect a complete range of natural regions, and wilderness landscapes and ensure the protection of flora and fauna within their natural habitat.

Central to all accepted protected area definitions are three basic criteria:

- The site must be legislated.
- The protection of natural heritage values must be a fundamental reason for the site's establishment.
- Management guidelines and monitoring programs must be instituted to ensure the site's long term protection.

Special Places 2000 has been developed consistent with the philosophy of these definitions. *Special Places 2000* builds on past accomplishments in Alberta and is based on the practicality of using a variety of designations to complete a comprehensive network of protected areas.

Benefits of Protected Areas

Ecological

Preserve genetic and biological diversity.
Maintain essential ecological processes and life support systems.
Retain future options.

Economic

Contribute to sustainable use and economic diversification through activities such as ecotourism.
Preserve biological diversity for development of economic products.

Recreation and health

Provide opportunities for a distinctive range of outdoor recreation.
Important component of our quality of life.

Scientific

Provide benchmarks for research and monitoring.
Study places for naturally occurring ecosystems.
Integrate environmental and economic decisions.

Education

Develop and promote an environmental consciousness and provide outdoor environmental classrooms.
Direct contact with nature.

Cultural and spiritual

Help to strengthen our cultural identity.
Provide places for aesthetics and for survival of species and ecosystems.
Places of spiritual renewal and inspiration.
Protect our natural heritage.
Respect the philosophy that all life has a right to exist and evolve.

The Framework

An Evolving Legacy

Albertans have traditionally had a love for their rich natural heritage.

Direct involvement of the Alberta Government in protected areas did not occur until after the control and administration of natural resources was vested with the province in the 1930s. Previously, the Canadian Government had established Banff (1885), Waterton Lakes (1895), Jasper (1907), Elk Island (1913) and Wood Buffalo (1922) national parks. From the 1930s and continuing to this day, about 8.2 percent of Alberta's land area has existed within national parks, a proportionate figure far higher than for other Canadian provinces.

Citizen groups such as the Alberta Audubon Society, the Alpine Club, the National Parks Association and the Alberta Fish and Game Association were formed before 1930. These and other groups were early advocates for protected areas.

Protected areas celebrate the beauty and the infinite variety of our land and its life. They are havens not only for wild species and wild spaces, but also for the human spirit.

Eight provincial parks were established in 1932. Although the 1932 legislation authorizing the designation of provincial parks included as one of its goals the establishment of large parks, none were created until Cypress Hills in 1951 and Dinosaur in 1955. By 1960, there were 34 provincial parks, about half the number in existence today. With a few notable exceptions such as Dinosaur and Writing-on-Stone, most of these parks were selected more for recreation than to protect our natural heritage.

Wilderness areas/parks were designated later, with Willmore in 1959, White Goat and Siffleur in 1961 and Ghost River in 1967.

In the 1960s, there was growing recognition of the need for a more comprehensive and systematic approach to the selection and management of protected areas.

In the 1960s and early 1970s, there was a tremendous growth in non-government organizations, related to environmental protection, including the Alberta Wilderness Association, Federation of Alberta Naturalists, Sierra Club of Alberta, and local clubs.

The efforts of the International Biological Program of the International Union for the Conservation of Nature resulted in the Alberta Government designating its first 96 natural areas in 1971 and the first 10 ecological reserves in 1987. In 1987, Canada's Wildlife Centennial, many new natural areas were also designated.

The most recent significant designations of protected areas were Lakeland Provincial Park and Suffield National Wildlife Area in 1992.

Albertans can be proud of past accomplishments relative to protecting our natural heritage. Albertans, however, should not be complacent. A systematic approach combined with immediate action is required if a comprehensive network of protected areas is to be passed on as a legacy to future generations.

An Integrated Context

Alberta's network of protected areas has evolved to include all three levels of government as well as the private sector. Various provincial agencies are responsible for provincial parks, natural areas, ecological reserves and recreation areas. The federal government manages five national parks and four national wildlife areas. Local governments operate municipal and urban parks and public interest groups are involved in setting aside protected areas.

Legislatively protected areas that are explicitly managed to conserve species and ecosystems provide the main supports that ensures the long-term retention of our natural heritage. They are a crucial component of a sustainable future. Legislatively protected areas, however, cannot be sustained in isolation. Their ecological integrity can only be ensured if they are integrated into the larger landscape.

Varying levels of protection on much of the 60 percent of the province that is under public ownership are afforded by government. *The Public Lands Act*, *Wildlife Act*, *Forests Act*, *Environment Act* and the *Planning Act* are used to ensure the retention of natural resource values within a philosophy of sustainability and wise-use. Policies and programs including integrated resource planning and management, policy zoning and operational safeguards help integrate protection into the larger landscape.

The following table lists special places that may contribute to protected area objectives. Many of the sites that are included in the table are not actually considered protected areas because they are

Protected areas are our lifeline to an ecologically sustainable future.

Crown Lands that May Contribute to Protected Area Objectives

Type	Number	Area (Km²)	% of Alberta
Legislated-Federal			
National parks	5	54,084	8.18
National historic parks	1	2	<0.01
National wildlife areas	4	424	0.06
Migratory bird sanctuaries	4	141	0.02
Legislated-Provincial			
Willmore Wilderness Park	1	4,597	0.70
Wilderness areas	3	1,010	0.15
Ecological reserves	13	271	0.04
Natural areas	118	355	0.05
Provincial parks	63	1,424	0.22
Historic sites	2	5	<0.01
Provincial wildlife areas	2	191	0.03
Provincial game bird sanctuaries	7	722	0.11
Wildlife habitat development areas	3	31	<0.01
Forest land use zones	10	5,120	0.77
Provincial recreation areas	126	597	0.09
Forest recreation areas	173	1,214	0.18
TOTAL	**535**	**70,188**	**10.62**
Unlegislated Protective Zoning	N/A	15,850	2.40
Unlegislated Reservations / Notations	517	4,286	0.66
GRAND TOTAL ALL CATEGORIES	**90,324**	**13.66**	

not explicitly managed to conserve species and ecosystems. For example, Forest Land Use Zones should probably not be included as they do not restrict industrial or consumptive uses. They only control public access. Similarly, reservations may or may not become established sites. Lands in all categories will be examined for their protection values as part of the Special Places 2000 initiative.

Alberta compared with other jurisdictions

Alberta has an inequitable distribution of protected areas with most protected land in the Rocky Mountains.

To compare Alberta to the rest of Canada and the world is difficult because of differences in legislation and policy, inconsistent reporting mechanisms and a wide diversity of protected area types. For example, the World Resources Institute reported in 1990 that Canada affords strict protection to 3.7 percent of its land area, compared with an average of 4.0 percent for all nations of the globe. In the same year, World Wildlife Fund Canada reported that 6.3 percent of Canada's landscape was legally protected but added that only 2.6 percent can be considered protected if one excludes areas where logging, mining, or hunting are permitted. Canada's Green Plan reported that 6.9 percent of the country is protected. Environment Canada's National Conservation Data Base identifies about 7.4 percent as protected.

Even with these inconsistencies some general comparisons can be made.

Although one can debate the types of areas to include within a grand total, there is no doubt that Alberta exceeds all other jurisdictions in Canada and ranks fairly high with the rest of the world, in terms of total and proportional area dedicated as protected areas. This is a result of the large area in Alberta that is designated as national parks – 5 408 400 ha or about 8.2 percent of the province. In terms of protected areas designated by the province, Alberta ranks behind British Columbia, Saskatchewan, Manitoba, Ontario and Quebec.

Alberta has an inequitable distribution and representation of protected areas. Most protected land is in the Rocky Mountains and the northern Boreal Forest. There are large gaps when compared with a comprehensive protected areas network. It is not known how this corresponds to all other Canadian jurisdictions; however, Alberta is well behind Ontario and proposed initiatives in British Columbia, the Yukon and the North West Territories in protecting its full range of natural heritage diversity.

Size of protected areas

The World Conservation Union recommends a size of at least 10 km^2 for protected areas.

How large a protected area should be depends on its purpose. Some small protected areas can have considerable ecological value. To protect a fossil site, the area needs to be only as big as the fossil site itself. To protect large carnivores, such as grizzly bears and wolves, areas of 1000 square kilometres and more are required. To provide complete ecosystem protection, there is no upper limit to size.

The World Conservation Union had recommended a size of at least 10 km^2 and only includes sites of this size and larger in their official listings. For sites protecting representative ecosystems, the Canadian Council on Ecological Areas recommends "large, intact" ecosystems are

preferable because they have more ecological value. Protected areas surrounded by highly developed/altered lands need to be larger to ensure long-term protection than protected areas surrounded by relatively natural landscapes.

Special Places 2000 is predicated on meeting the goals expressed for protection, outdoor recreation, heritage appreciation and tourism. Sometimes sites need to be quite large to satisfy these goals. To attract national and international adventure and ecotourism markets, for example, protected areas may need to be large enough to permit visitors to escape the influence of civilization for at least several days.

Legislation

Alberta has an adequate legislative base to implement Special Places 2000. The Provincial Parks Act, the Wilderness Areas, Ecological Reserves and Natural Areas Act and the Willmore Wilderness Park Act will continue to be the primary provincial legislation used for protected areas. Other acts such as the Wildlife Act with its bird and wildlife sanctuaries and the Historic Resources Act will be used, where appropriate.

Although no new legislation is required, amendments to the Wilderness Areas, Ecological Reserves and Natural Areas Act are currently being considered to address public concerns. The roles played by many areas established under Alberta's various pieces of protection legislation are poorly defined. Some provincial parks and natural areas, along with many recreation areas, such as highway campsites, play an almost negligible role in protecting species and ecosystems. The roles of various categories of protected areas need to be clarified.

Global Classification

Internationally, protected areas are ranked in terms of the amount of human alteration to the natural environment that is sanctioned within such areas. The World Conservation Union and its Commission on National Parks and Protected Areas identify categories of protected areas. The categories are generally arranged in order of increasing human intervention. This classification aims to discourage the narrow view that protected areas are single-purpose areas. Instead, it promotes a broader concept of varying degrees of conservation and use. No single World Conservation Union category is more important than another. Each offers a different level of protection depending on how much is required to maintain the natural heritage features and the desired values associated with the site.

International classifications recognize that protected areas fulfil the need to conserve species and ecosystems in a wild state while also fulfilling the need for certain sustainable economic and social returns such as recreation, heritage appreciation and tourism. For example, although all provincial tourism needs can not and should not be met within a system of protected areas, the need for tourism can be partially achieved in protected areas through ecotourism. Ecotourism acts as a powerful force for conservation as well as being a contributor to economic diversification. Similarly, all recreation and heritage appreciation needs can not and

Ecotourism

Ecotourism is a nature travel experience which contributes to the understanding and conservation of the natural and cultural environment.

Characteristics of Ecotourism

It must promote positive environmental ethics.

It is centered on the natural and cultural resource and does not degrade the resource.

It must benefit wildlife and the environment.

It provides benefits to participants through education and interpretation.

It is a first-hand experience with the natural environment.

It is characterized by experiences that increase awareness or stir emotions.

There are varying degrees of conservation and use within protected areas.

Today, recreation, education and economic return through tourism are internationally recognized as legitimate goals for protected areas along with the conservation of species and ecosystems.

should not be met within a system of protected areas.

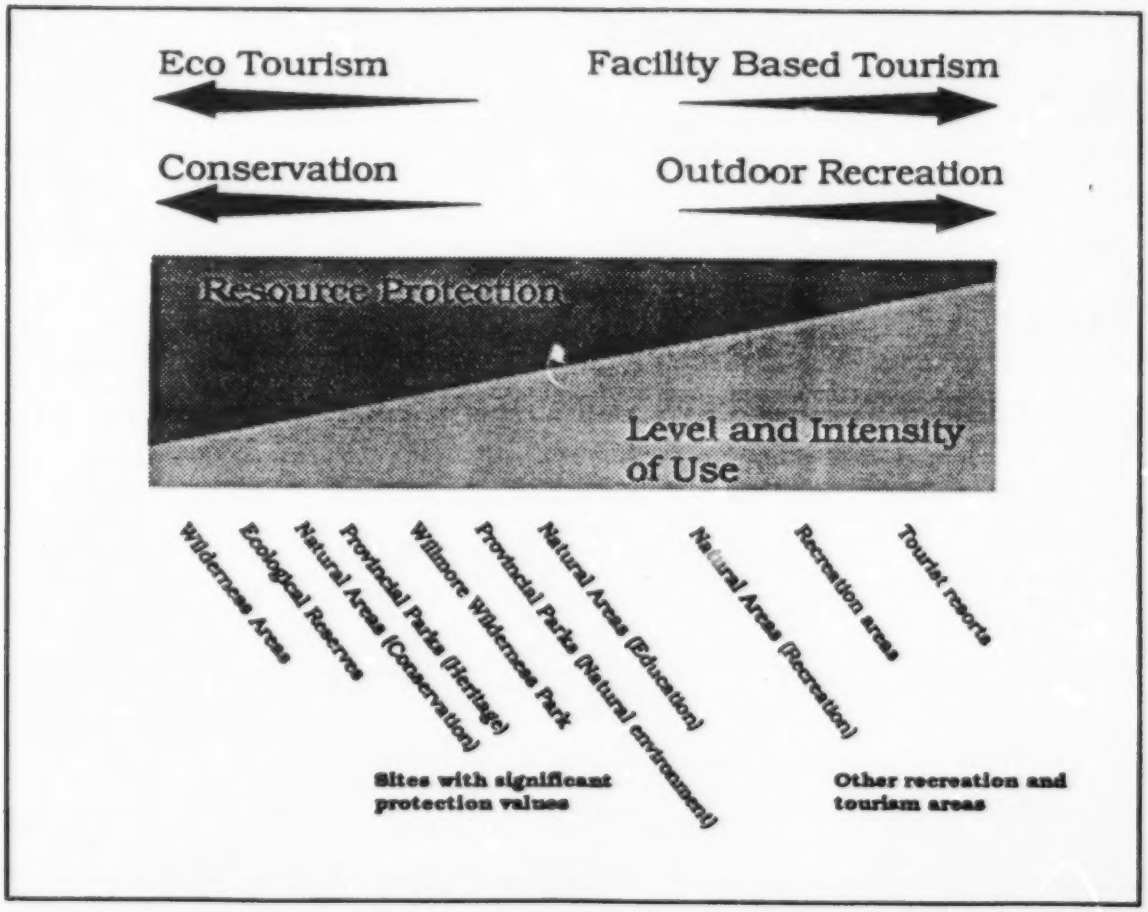
At the same time, international classifications recognize that large protected land bases are required for heritage appreciation, wildland recreation and a range of nature-oriented tourist pursuits.

Today, recreation, education and economic return through tourism are internationally recognized as legitimate goals for protected areas along with the conservation of species and ecosystems. All four are important aspects of a sustainable future.

Classification in Alberta

A hypothetical example of the spectrum of conservation and outdoor-recreation lands in Alberta is shown below. Within this spectrum, sites on the left-hand side contribute to the Special Places 2000 initiative while those on the right do not. For example, tourist resorts, on the right-hand side, only consist of the facilities themselves and not the surrounding lands. Therefore, they cannot be considered

Hypothetical Spectrum of Conservation and Outdoor - Recreation Lands



protected areas, even though they are part of the spectrum of outdoor-recreation lands.

The spectrum also reflects the reality that some protected area categories almost totally exclude competing resource uses while others permit varying degrees of resource exploitation. Wilderness Areas, for example, preclude oil and gas exploration and development while activities related to this industry are permitted under controlled conditions in recreation areas and most natural areas and provincial parks.

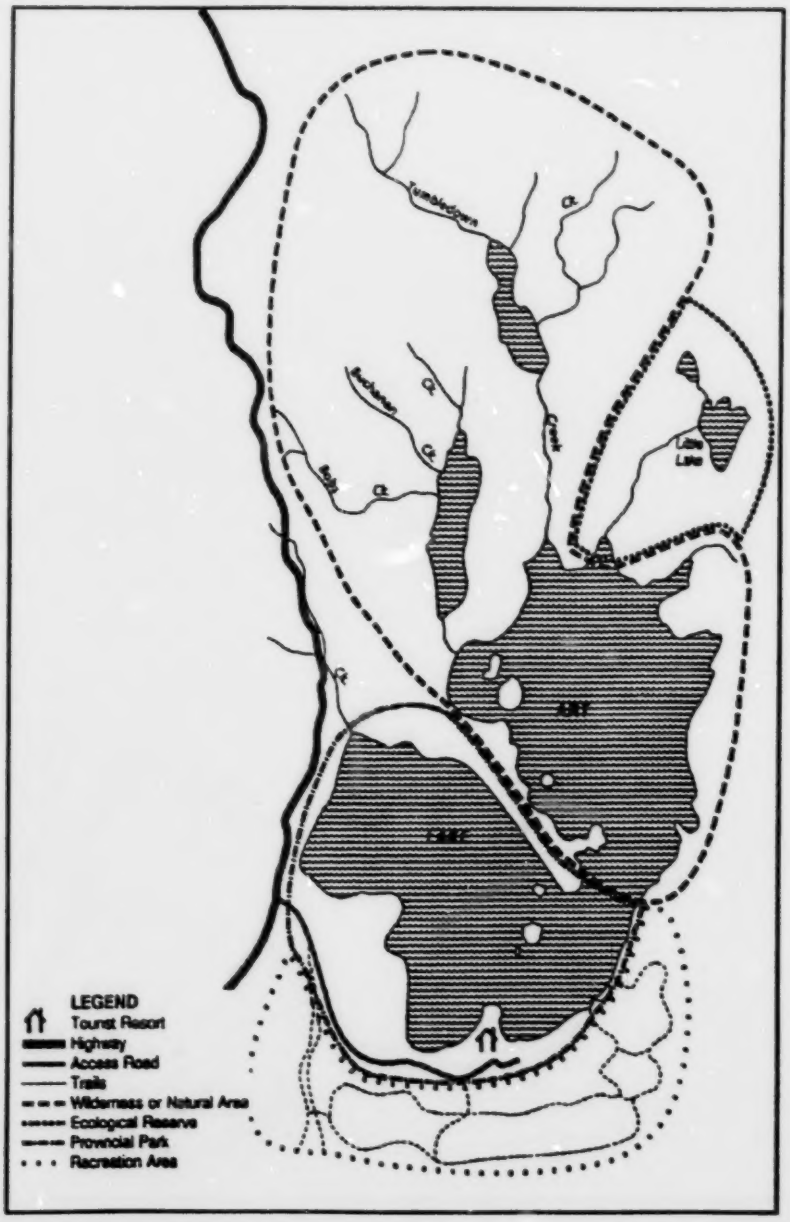
Protected areas in Alberta can be classified in terms of the contribution they make to the four system objectives: **protection, outdoor recreation, heritage appreciation and tourism.** Based on the capability of the resources of an area to sustain use and on the sensitivity and significance of the species and ecosystems it protects, each individual site contributes to the four goals to varying degrees.

Sites can be grouped into classes based on similar contributions to these objectives. Such a classification will result in a spectrum of protected areas from those that are highly protected, thus strongly contributing to the protection goal but make only modest contributions to outdoor recreation and tourism goals, to those whose resources are less stringently protected and outdoor recreation and tourism play a dominant role.

Such a classification will assist:
- the public in monitoring progress towards completing a comprehensive network of protected areas;
- site users in selecting appropriate areas to satisfy their needs;
- managing agencies in establishing guidelines that ensure appropriate levels of site management and facility development;
- commercial tourism and recreation interests in responding to market demands in appropriate locations; and
- resource users to understand the management parameters of different areas.

Another advantage is that the various classes of protected areas can be established in different combinations (see figure below). In this diagram a wilderness area encompassing much of the drainage basin north of Art Lake is abutted on the south by a provincial park which will provide a balance of outdoor recreation and protection. Further south a provincial recreation area has been designated to permit more intensive

Hypothetical Use of Classes to Ensure a Balance Between Protection and Use



Classes of protected areas can be established in combination to satisfy a range of needs.

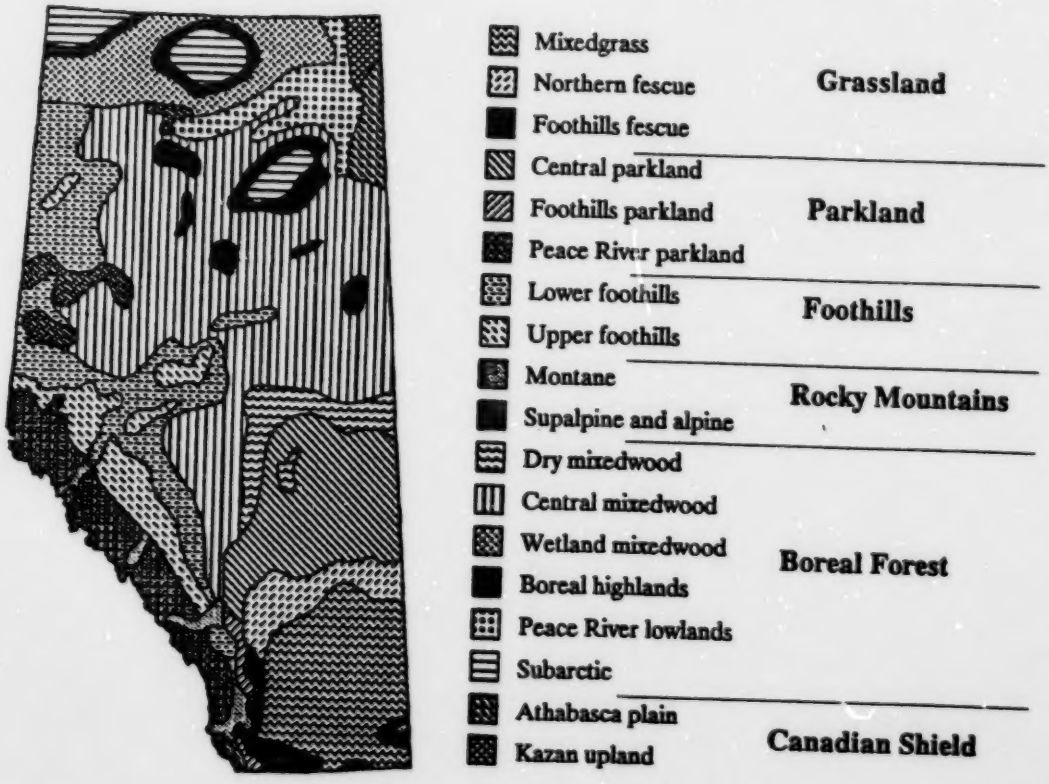
recreational activities such as off-highway vehicles. This approach results in the establishment of larger protected areas with greater overall ecological integrity. At the same time, the management flexibility created by using the classes in combination can enable the larger protected areas to satisfy a wide range of public demands. The various classes of protected areas can also be used in any combination with non-protected areas.

Using a protected areas classification will help participants to design appropriate management of sites that balances resource protection with resource use.

Natural regions and natural history themes

Alberta's systems planning for protected areas, based on the hierarchy of natural regions and natural history themes, is among the most progressive in all of Canada. This work has been recommended as a model for all other Canadian jurisdictions by the Canadian Council on Ecological Areas.

Within Alberta, physical landscapes and biological features tend to be regionally oriented, thereby providing an opportunity to divide the province into different units (see map below). The ecological diversity of the province can be described within this hierarchy.



This hierarchy serves all four protected area goals of protection, outdoor recreation, heritage appreciation and tourism. It helps to refine these goals and helps in setting targets. The hierarchy has been in place since the 1970s and was revised in 1992 to include the most up-to-date information.

At its broadest level are six natural regions: Grassland, Parkland, Foothills, Boreal Forest, Rocky Mountain and Canadian Shield. The natural regions reflect the recurring, distinctive landscape patterns of vegetation, soils, and landforms. Each natural region is further subdivided into subregions based on recurring landscape patterns. This subdivision has resulted in 19 subregions that represent the broad diversity of Alberta.

Within each subregion, there is still considerable landscape diversity. For example, there may be uplands (both sandy and non-sandy), rivers, different types of wetlands and other features. The most prominent landscape features are identified as level I

There are 6 natural regions and 19 subregions in Alberta. Within each subregion, there are a variety of natural history themes.

Alberta Natural History Theme Matrix (Level 1)

Theme Groups	Level 1 Themes	Natural Regions & Sub-regions																			
		Grassland			Parkland			Foothills		Rocky Mountains			Boreal Forest						Canadian Shield	
		Mixed	Northern Fescue	Foothills Fescue	Central	Foothills	Peace River	Upper	Lower	Alpine	Subalpine	Montane	Dry Mixedwood	Central Mixedwood	Wetland Mixedwood	Boreal Highlands	Peace River Lowlands	Subarctic	Athabasca Plain	Kazan Uplands
Non-Sandy Upland	Glacial Lake Bed	•		•	•	•	•								•		•			
	Ground Moraine	•	•	•	•	•							•	•	•	•		•		
	Hummocky Moraine	•	•	•	•	•							•	•		•				
	Bedrock																			•
Sandy Upland	Sandy Plain	•	•	•	•	•							•	•	•				•	•
	Dune Field	•	•		•	•							•	•		•			•	
	Kame Moraine/Complex				•	•													•	
Valley Ridge	Exposed Slope	•	•	•	•	•	•							•						
	Protected Slope	•	•	•	•	•	•						•	•	•	•	•	•		
	Floor/Stream	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
	Ridge/Valley Wall			•				•	•	•	•	•								
	Springs	•	•	•	•	•														
Wetland	Wet Meadow	•	•	•	•	•	•													
	Shallow Marsh	•	•	•	•	•	•													
	Deep Marsh	•	•	•	•	•	•													
	Alkali Wetland	•	•		•	•														
	Mineral							•	•	•	•	•	•	•	•	•	•	•	•	•
	Organic							•	•	•	•	•	•	•	•	•	•	•	•	•
	Lake		•		•	•	•	•	•		•	•	•	•	•	•		•	•	•
Glacier Snowfield	Glacier/Snowfield										•									

The hierarchical natural regions and natural history themes allows for a systematic and comprehensive selection of protected areas.

natural history themes, for each region.

Level I themes have be determined based on existing information sources. For the province as a whole, 20 level I natural history themes have been identified. These are grouped into five major categories: non-sandy upland, sandy upland, valley/ridge, wetland, and glacier/snowfield. Within any one of the 19 subregions, level I themes have been identified where they occupy more than 1 percent of the landscape within one of the five major categories. The result has been the identification of 155 level I natural history themes from 19 subregions, within 6 natural regions for the entire province of Alberta. The matrix on the previous page displays Alberta's natural history themes.

Level I themes can be further subdivided into level II themes, level III themes and so on to give finer levels of resolution. Level II themes are the landform and lifeform components that are typically found within level I themes. Level III themes are those features that are typical within level II themes, etc.

For example, organic wetlands are identified as a level I theme in the subarctic subregion of the Boreal Forest Natural Region. These organic wetlands can be separated into a number of types including Black Spruce Forest, which is considered a level II theme. At level III, black spruce forests can be further subdivided into black spruce - peat moss - lichen communities and black spruce - cloudberry communities, etc. Level III themes are also useful for identifying special features such as the Plateau Mountain ice cave.

The hierarchy and accompanying examples are shown below.

Hierarchy for Protected Areas in Alberta

Hierarchy	Example 1	Example 2
Natural Region (6)	Grassland	Boreal Forest
↓	↓	↓
Subregion (19)	Mixed Grassland	Subarctic
↓	↓	↓
Level I Theme (155)	Dune Field	Organic Wetland
↓	↓	↓
Level II Theme	Active Sand	Black Spruce Forest
↓	↓	↓
Level III Theme	Parabolic Dune	Black Spruce-Cloudberry
↓	↓	↓

Current Committments and Future Implementation Initiatives

General Initiatives

Public Involvement	Release position paper →	Develop public involvement plan →	Implement public involvement →		
Hierarchical Framework Update	Update natural regions and natural history theme matrix →	Evaluate protected areas against matrix and identify gaps →	Refine level II and III natural history themes →	Evaluate protected areas against matrix and repeat →	Ongoing →
Environmentally Significant Areas Inventories	Identify areas requiring ESA inventories →	Complete ESA for NE Alberta →	Complete ESA study for Clear Hills →	Complete ESA study for Special Areas →	New ESAs →
Protected Areas Information Management	Prepare implementation recommendations →	Approve implementation →		Secure nongovernment funding →	Implement →
Revolving Fund for Land Acquisition	Prepare background paper →	Approve implementation →	Implement revolving fund →		
Legislation	Review existing protected areas legislation →	Amend legislation →	Review and amend as necessary →		

Current Program Initiatives

Ecological Reserves	Establish sites in progress (Ross Lake, Egg Island, Prairie Coulee) →	Reappoint Advisory Committee →	Identify candidate sites for Advisory Committee →	Establish new reserves →		
Provincial Parks/ Recreation Areas	Prepare classification →	Reassign parks and recreation areas to classification →	Determine recreation, heritage and tourism opportunities →	Determine priority Crown land additions →	Determine private land needs →	Identify candidate sites for new parks →
Natural Areas	Establish sites in progress →	Prepare classification →	Establish long-term targets →	Establish new natural areas →		
Wilderness/ Wildland	Identify candidate boreal wilderness →	Identify legal designation →	Review and recommend designation →	Identify candidate sites for new wilderness →	Establish new wilderness →	
Heritage Rivers	Decision to participate in program →	Undertake systems feasibility study →	Identify first river and do background study →	Undertake management plan →	First river designated →	Undertake other background studies →

Emerging Protection Issues

Wetlands

Old-growth forests

Special Species

Others

As strategies for these issues evolve they will be evaluated in terms of their relationship to *Special Places 2000*.

The Strategy

There is a sense of urgency in getting on with the task of completing a comprehensive network of protected areas.

Alberta's first nomination of a river under the Canadian Heritage Rivers program could take place as early as 1994.

Wilderness in the boreal forest could be established by 1994.

Immediate Action

The Premier and the Government of Alberta have reaffirmed their commitment to a network of protected areas that represents the environmental diversity of the province. *Special Places 2000* will provide the direction to honour this commitment. The initial steps have been taken to capitalize on protected areas legislation and programs that already exist in Alberta. Ongoing efforts will rely on a systematic approach, close coordination, up-to-date information and progressive partnerships. Initiatives and programs where immediate actions will be taken are shown on the table on the left page. New programs, consistent with societal demands expressed through ongoing public involvement, will be initiated as *Special Places 2000* is implemented.

Existing Sites

Classification of all existing legislatively protected areas in Alberta is a high priority. Existing sites will be examined to determine their contribution to the four broad objectives: protection, outdoor recreation, heritage appreciation and tourism. Sites that are inappropriately categorized cause confusion for decision makers, site managers and the public. These will be re-classified. For example, a number of existing provincial parks have minimal natural history values worthy of protection and would be more appropriately designated as recreation areas. Similarly, Natural Areas need to be classified and managed according to their resource values, with some being reclassified or de-designated.

Existing protected areas will be evaluated for possible boundary adjustments. The contribution of several sites to achieving the goals of *Special Places 2000* can be significantly enhanced by additional lands. Although private lands may seem costly to purchase they can be a good investments especially where facilities and programs already exist and no new staff are required. Adjacent lands, both private and Crown will be evaluated and considered for incorporation when they accomplish the following:

- add significantly to natural history theme representation of the overall network;
- include significant features;
- enhance opportunities for heritage appreciation and outdoor recreation;
- improve resource management integrity and capability, for example, by including an entire wetland;
- serve as buffers to protect the overall integrity and serve as a transition to more intensive land uses;
- consolidate existing protected areas into natural corridors that can be used to provide for trails and to protect wildlife travel patterns.

In some instances, lands already legislated as protected areas might have little protection value. Innovative exchanges of these lands and other acquisition alternatives will be investigated to ensure that the best lands are included in the protected areas network.

Systematic approach

Alberta's network of protected areas will be shaped according to the ecological diversity of the province as described by the hierarchy of natural regions and natural history themes. This systematic approach will guide protected area selection in a rational manner. All of Alberta's existing protected areas will be analyzed to determine those themes that are well represented and to identify gaps in the present coverage. Potential sites in various natural regions are being identified through regional reconnaissance studies and some detailed inventories.

Selection criteria will consider existing resource commitments and future potentials. For example, where choices exist, land with low sub-surface potential for oil and gas and other minerals will be favoured over lands with high potential.

Preliminary work has identified many sites with significant natural heritage values. These include sites in the Canadian Shield, the Boreal Forest and the Grassland regions where current representation is poor. Known important sites will be considered for designation as soon as possible. Site selection will take into account current issues such as protection of wetlands, old growth forests and special species.

New candidate sites, including those with a high priority based on protection issues, will be evaluated within the hierarchical system. Once sites are identified and boundaries determined, appropriate classification and legislative programs will be selected. Determining the appropriate legislative designation for a particular site is crucial. The level of protection afforded must ensure that the site and its resource values will be retained in perpetuity. Where appropriate, sites will serve multiple goals including protection, outdoor-recreation, heritage appreciation and tourism. For example, a provincial park and an adjacent ecological reserve may serve the goals of protecting an area of high biological diversity while providing the public the opportunity to appreciate Alberta's unspoiled natural landscapes. As well, a protected area such as a natural area, may be established in conjunction with a Canadian Heritage River designation. Such combinations will depend on a number of factors such as land use conflicts, historical uses and existing legislation and policy.

Alberta's network of protected areas will include the full range of environmental diversity in the province.

Combinations of protected area categories will also minimize conflicts with other resource industries such as oil and gas. Core ecological reserves, for example, may preclude further development while surrounding natural areas may permit controlled exploration under stringent conditions.

Alberta's existing protected areas are being analyzed to determine those themes that are well represented and to identify gaps in present coverage.

Setting Targets

Goals for the four broad systems objectives – **protection, outdoor recreation, heritage appreciation and tourism** – were stated at the beginning of this position paper. To guide selection of sites and to monitor progress toward achieving these goals, targets need to be established for each of these goals.

Site selection will take into account current issues such as protection of wetlands, old growth forests and special species.

Protection: To protect the full range of landscapes, environmental diversity and special natural features of Alberta.

To guide selection of sites and to monitor progress toward achieving these goals, targets need to be established for each goal.

Outdoor recreation: To protect natural landscapes throughout Alberta for a variety of resource-based, dispersed outdoor recreation pursuits.

Heritage appreciation: To protect landscapes that ensure that Albertans and visitors have the opportunity to explore, understand and appreciate the full range of Alberta's natural heritage.

Tourism: To protect areas capable of sustaining adventure travel and ecotourism, including extended tours that enable visitors to experience unspoiled landscapes and abundant wildlife representative of Alberta's natural regions.

There will be effective involvement of the public, industry and non-government organizations in all aspects of protected areas including the setting of targets.

The involvement of all Albertans, industry and non-government organizations is a crucial component for the setting of targets. The public will assist in refining the targets for the four goals and in recommending sites and how they should be managed. This input will also help weigh selection criteria, such as protection values versus competing uses.

To meet the protection goal, reasonable targets will be established based on the hierarchy – the natural regions and natural history themes.

Level I themes are useful for identifying gaps in the existing coverage of the protected areas system and can be used as a yardstick against which to measure progress. Level II themes are extremely useful in comparing sites under consideration for achieving the level I targets.

Both level I and level II theme totals are easily kept up-to-date as new sites are added to the protected area system.

Protected area targets to serve the outdoor recreation goal will be set in the context of the broader spectrum of outdoor recreation programs provided throughout Alberta. These targets will focus on natural environments capable of meeting public demand for wilderness, wildlife viewing and other nature-oriented extensive recreational activities (e.g., hiking, cross-country skiing, equestrian riding). Outdoor recreation targets will include locations both in remote areas and in areas close to population centres.

Protected area targets to meet the heritage appreciation goal will ensure that present and future generations have the opportunity to experience and appreciate the full range of Alberta's natural landscapes. Targets will include at least one protected area in each of the subregions. These protected areas must be large enough to encompass the diversity of level I and level II natural history themes in the subregion. This will enable educational and interpretive programs to enhance visitor knowledge and understanding of Alberta's environmental diversity, ecological processes and life support systems. These programs will foster better stewardship and a sustainable environmental ethic among Albertans. Smaller protected areas for educational and research purposes will be established to meet user needs.

Protected area targets for tourism will be set in recognition of the dependence of ecotourism and some adventure tourism pursuits on unaltered landscapes. The targets will ensure that Alberta's natural landscapes continue to act as major tourism attractions for provincial, national and international markets. In this way protected areas will play an increasingly important role in Alberta's economy. Wilderness/wildland areas may be established in each of the six natural regions. Large protected

areas are necessary to attract international tourist markets dependent on wilderness tours that last from a few days to more than week. Consideration could also be given to designating at least one Heritage River in each of the six natural regions.

Information

Committing to a comprehensive system of protected areas requires an extensive, sophisticated and up-to-date information base and information management system. Such information is required to select appropriate new protected areas, to determine boundaries, to manage existing sites and to monitor changes. At least some of the data collection and its management should be compatible with that of other jurisdictions at the provincial, national and international levels in order to ensure that there is national and global monitoring of protected areas issues.

As a minimum, the following information requirements will be considered for early implementation: environmentally significant areas inventories for the province; information collection and management system for elements of natural heritage; and information management system for administrative items.

Partnerships

The issues confronting protected areas in Alberta need to be addressed through a multi-sectoral, multi-jurisdictional and multi-disciplinary approach. No single agency, organization or individual has the ability or power to deal adequately with protected areas. There is a need for coordination in planning, site selection, management and monitoring. All avenues of creative partnerships will be explored. At the same time, existing protected area programs, such as natural areas and ecological reserves, will continue.

Existing public involvement programs can continue. For example, Alberta Forestry, Lands and Wildlife's Advisory Committee will continue to provide public input at the departmental level. As well, the important role of the Wilderness Areas and Ecological Reserves Advisory Committee will be ongoing. Processes for establishment of sites, policy formulation and management planning for specific programs such as ecological reserves and natural areas will continue to provide public input opportunities at program levels.

Coordinated public involvement is also essential to ensure effective communication. There will be effective involvement of the public in all aspects of protected areas to ensure that present and future values are maintained. Individuals and groups will be encouraged to take an active role in becoming wise stewards of our protected areas. The involvement of people living near protected areas will be especially encouraged.

Partnerships will be strengthened with conservation organizations. The Park Ventures Fund of the Recreation, Parks and Wildlife Foundation will be considered for administrating a revolving fund for land acquisitions when private lands are offered for sale. Such a fund could, for example, apply proceeds from the sale of low priority conservation lands to the acquisition of lands higher in biophysical value.

Partnerships within and among all levels of government in Alberta will be encouraged. Coordination

Committing to a comprehensive network of protected areas requires an extensive, sophisticated and up-to-date information base and information management system.

All avenues of creative partnerships will be explored.

Alberta's comprehensive network of protected areas will be forged through the cooperation of Albertans.

and cooperation will be increased between provincial agencies and with local and regional governments.

New partnerships with industry will be built. Industry has a prominent role to play in protected areas ranging from management of existing protected areas that are close to their operations, assisting in the identification of new protected areas and incorporating protected areas into their overall corporate strategies.

The ability of protected areas to function as viable units over the long term cannot be guaranteed simply by legislating boundaries.

Ecological Management

Greater emphasis will be placed on the ecological management of Alberta's protected areas. Management plans, guidelines and monitoring programs will be prepared and implemented for all protected areas. Plans will be based on ecological objectives that clearly define the role of the specific area in the overall network.

Natural resources, ecological processes and our use of species and ecosystems are all interconnected. Our continued prosperity, even survival, is dependent upon striking a balance between the environment and economy. Protected areas play a vital role in this symmetry. They are the link.

It is recognized that the ability of protected areas to function as viable units over the long term cannot be guaranteed simply by legislating boundaries. As much as possible, the management of protected areas will be integrated with the management of surrounding lands. In the preparation of future integrated management plans for Crown lands, close attention will be placed on minimizing external threats to protected areas. Greater efforts will be placed on developing partnerships and cooperative management with surrounding landowners and stakeholders for research, monitoring and public education.

Coordination and Reporting

Coordination of the implementation of *Special Places 2000* will continue to be an interdepartmental responsibility of the Deputy Ministers of Tourism, Parks and Recreation, Environment and Forestry, Lands and Wildlife. The Minister of Tourism, Parks and Recreation will play a lead role to ensure that the program is implemented. Annual progress toward achieving the goals of *Special Places 2000* will be summarized in the annual report of the Advisory Committee on Wilderness Areas and Ecological Reserves. This advisory committee's role may be expanded to deal with public input on the protected areas strategy for Alberta.

Continuing the Legacy

There is tremendous opportunity for further protected area initiatives under existing legislation and programs. New approaches are necessary to meet the increasing challenges facing protected areas. These challenges include responding to increasing public concern for protected areas, establishing critically needed areas, managing and monitoring existing sites, coordinating existing programs and agencies that deal with these areas, and many others.

An expanded and comprehensive network of protected areas will soon exist in Alberta, to adequately protect examples of the full environmental diversity of the province.

Immediate action is required because recent and on going

land-allocation decisions will foreclose some remaining protected areas options.

To achieve this network of protected areas, a diversity of approaches is needed. A full range of categories of protected areas is needed, ranging from strictly protected ecological reserves to sites with more flexible management regimes. This network of protected areas will include the full range of ecological resources in Alberta and will be managed to prevent any threat to the ecological integrity of the values of these precious sites.

This comprehensive network of protected areas must be forged through the cooperation and concerted efforts of all levels of government, the private sector, non-government organizations, individual landowners – all Albertans. The efforts of all must merge to form a single, coordinated effort, rather than occur as unsystematic, distinct and separate initiatives.

There is a sense of urgency in getting on with the task of completing a comprehensive network of protected areas. We must commit ourselves to our responsibility to past, present and future generations of Albertans to ensure the integrity of our natural heritage is protected. As the pace of human activity and resulting landscape change in the province quickens and intensifies, new approaches and action are immediately needed to respond to the challenge of protected areas.

A comprehensive network of protected areas is only one component of wise environmental management, but it is an essential and irreplaceable component. Protected areas are our bridge to an ecologically sustainable future.

Special Places 2000 will stimulate action, on-the-ground. By the year 2000, we will be able to take pride in our comprehensive network of protected areas. The ecological diversity of our province will have been protected as a legacy for future generations of Albertans.

Special Places 2000: Alberta's Natural Heritage is a foundation document. The document is a starting point from which to move forward ultimately leading to a Government plan of action. All Albertans along with industry, non-government organizations and other levels of government are invited to respond. Response is invited with regard to the scope of Special Places 2000 as well as to how the initiative should be implemented. Albertans views on which areas should be protected and how these special places should be managed is critical. Sufficient technical detail has been incorporated into Special Places 2000 so that those who have an expressed interest in protected areas can provide detailed responses. A summary document will be prepared for individuals and groups who have a general interest in protecting Alberta's natural heritage.

By the year 2000, we will be able to take pride in our comprehensive network of protected areas.

The preparation of this document was coordinated by Alberta Tourism Parks and Recreation, Forestry Lands and Wildlife, and Environment.

If you would like further information or if you wish to provide initial comments, please write to:

Mr. Bruce Duffin
1600 Standard Life Centre
Alberta Tourism, Parks and Recreation
10405 Jasper Avenue
Edmonton, Alberta
T5J 3N4